**Amendments to the Claims:** 

This listing of claims will replace all prior versions, and listings, of claims in the

application.

(Previously presented) A smart instrument for use in a surgery system,

comprising:

a housing;

a plurality of light emitting diodes coupled to the housing and being adapted to fire

independently; and

a wireless transceiver adapted to communicate with the surgery system, wherein bi-

directional communication of the smart instrument with the surgery system is solely through a

wireless communication system.

2. (Previously presented) The smart instrument of claim 1, wherein the smart

instrument includes a memory circuit for storing information related to the smart instrument, and

wherein the smart instrument transmits the information stored on the memory circuit in response

to a received signal from the surgery system when the smart instrument is placed within a field

of detection.

3. (Currently Amended) The smart instrument of claim 2, wherein the information

includes identification information.

- 4. (Previously presented) The smart instrument of claim 1, wherein the smart instrument includes a status light.
- 5. (Previously presented) The smart instrument of claim 1, wherein the smart instrument is adapted to be for a specific purpose.
- 6. (Previously presented) The smart instrument of claim 1, wherein the smart instrument is adapted to be used as a pointer.
- 7. (Previously presented) The smart instrument of claim 1, wherein the smart instrument is adapted to be used as a scalpel.
- 8. (Previously presented) The smart instrument of claim 1, wherein the smart instrument is adapted to be used as a probe.
- 9. (Previously presented) The smart instrument of claim 1, wherein the smart instrument is adapted to be used as a validation tool for other smart instruments.
- 10. (Previously presented) The smart instrument of claim 1, wherein the smart instrument is adapted to be used as a suction device.

11. (Previously presented) The smart instrument of claim 1, wherein the smart

instrument is adapted to be used as a pin.

12. (Previously presented) The smart instrument of claim 1, wherein the smart

instrument is adapted to be used as a clamp.

13. (Previously presented) The smart instrument of claim 3, wherein the smart

instrument is adapted to be interchangeably coupled with a plurality of generic instruments.

14. (Previously presented) The smart instrument of claim 3, wherein the smart

instrument is adapted to be interchangeably coupled with a patient tracking system.

15. (Previously presented) The smart instrument of claim 3, wherein the smart

instrument is adapted to be interchangeably coupled with a patient tracking system and at least

one generic instrument.

16. (Previously presented) The smart instrument of claim 1, wherein the smart

instrument includes an activation button.

- 17. (Previously presented) The smart instrument of claim 3, wherein the smart instrument includes an activation button.
- 18. (Previously presented) The smart instrument of claim 17, wherein the information includes a status of the activation button.
- 19. (Previously presented) The smart instrument of claim 1, wherein the smart instrument includes a plurality of control buttons for remotely controlling the surgery system.
- 20. (Currently Amended) The smart instrument of claim 3, wherein the smart instrument includes a plurality of control buttons for remotely controlling the surgery system.
- 21. (Previously presented) The smart instrument of claim 20, wherein the information includes a status of control buttons.
- 22. (Previously presented) The smart instrument of claim 1, wherein the smart instrument includes an up button, a select button, and a down button.
- 23. (Previously presented) The smart instrument for use in a surgery system, comprising:

a housing;

a plurality of light emitting diodes coupled to the housing and being adapted to fire

independently;

a wireless transceiver adapted to communicate with the surgery system; an activation

button; an adapter interface coupled to the housing; and

a release button operatively coupled to the adapter interface, wherein the smart

instrument is adapted to be interchangeably coupled with a patient tracking system and at least

one generic instrument, and wherein bi-directional communication of the smart instrument with

the surgery system is solely through a wireless communication system.

24. (Previously presented) The smart instrument of claim 23, wherein the smart

instrument further includes a memory circuit for storing information related to the smart

instrument, and wherein the smart instrument transmits the information stored on the memory

circuit in response to a received signal from the surgery system when the smart instrument is

placed within a field of detection.

25. (Previously presented) The smart instrument of claim 24, wherein the

information stored on the memory circuit is updated by the surgery system.

26. (Previously presented) The smart instrument of claim 24, wherein the

information stored on the memory circuit includes calibration information.

- 27. (Previously presented) The smart instrument of claim 26, wherein the calibration information is updateable using a calibration station.
- 28. (Previously presented) The smart instrument of claim 24, wherein the smart instrument further includes a validation point for validating other smart instruments.
- 29. (Previously presented) A smart instrument for use in a surgery system, comprising:

a housing;

- a plurality of light emitting diodes coupled to the housing and being adapted to fire independently;
  - a wireless transceiver adapted to communicate with the surgery system;
  - a plurality of control buttons for remotely controlling the surgery system; and
- a work tip coupled to the housing, wherein bi-directional communication of the smart instrument with the surgery system is solely through a wireless communication system.
- 30. (Previously presented) The smart instrument of claim 29, including a memory circuit for storing information related to the smart instrument, and wherein the smart instrument transmits the information stored on the memory circuit in response to a received signal from the surgery system when the smart instrument is placed within a field of detection.

- 31. (Previously presented) The smart instrument of claim 30, wherein the information stored on the memory circuit is updated by the surgery system.
- 32. (Previously presented) The smart instrument of claim 30, wherein the information stored on the memory circuit includes calibration information.
- 33. (Previously presented) The smart instrument of claim 32, wherein the calibration information is updateable using a calibration tool.
- 34. (Previously amended) The smart instrument of claim 29, wherein the smart instrument further includes a validation point for validating other smart instruments.

Claims 35-79 (canceled).

- 80. (Previously presented) The smart instrument of claim 2, wherein the information stored on the memory circuit is updated by the surgery system.
- 81. (Previously presented) The smart instrument of claim 3, wherein the information stored on the memory circuit includes calibration information.
- 82. (Previously presented) The smart instrument of claim 81, wherein the calibration information is updateable using a calibration station.

83. (Previously presented) The smart instrument of claim 9, wherein the smart

instrument further includes a validation point for validating other smart instruments.

84. (Previously presented) The smart instrument of claim 24, wherein the

information includes identification information.

85. (Previously presented) The smart instrument of claim 84, wherein the smart

instrument includes a status light.

86. (Previously presented) The smart instrument of claim 84, wherein the smart

instrument is adapted to be interchangeably coupled with a patient tracking system.

87. (Previously presented) The smart instrument of claim 84, wherein the smart

instrument is adapted to be interchangeably coupled with a patient tracking system and at least

one generic instrument.

88. (Previously presented) The smart instrument of claim 87, wherein the smart

instrument includes an activation button.

- 89. (Previously presented) The smart instrument as set forth in claim 84, wherein the information also includes calibration information.
- 90. (Previously presented) The smart instrument of claim 88, wherein the information includes a status of the activation button.
- 91. (Previously presented) The smart instrument of claim 30, wherein the information includes identification information.
- 92. (Previously presented) The smart instrument of claim 29, wherein the smart instrument includes a status light.
- 93. (Previously presented) The smart instrument of claim 29, wherein the smart instrument is adapted to be used as a pointer.
- 94. (Previously presented) The smart instrument of claim 29, wherein the smart instrument is adapted to be used as a scalpel.
- 95. (Previously presented) The smart instrument of claim 29, wherein the smart instrument is adapted to be used as a probe.

96. (Previously presented) The smart instrument of claim 29, wherein the smart

instrument is adapted to be used as a validation tool for other smart instruments.

97. (Previously presented) The smart instrument of claim 29, wherein the smart

instrument is adapted to be used as a suction device.

98. (Previously presented) The smart instrument of claim 29, wherein the smart

instrument is adapted to be used as a pin.

99. (Previously presented) The smart instrument of claim 29, wherein the smart

instrument is adapted to be used as a clamp.

100. (Previously presented) The smart instrument of claim 29, wherein the smart

instrument includes an activation button.

101. (Previously presented) The smart instrument of claim 30, wherein the smart

instrument includes an activation button.

102. (Previously presented) The smart instrument of claim 101, wherein the

information includes a status of the activation button.

103. (Previously presented) The smart instrument of claim 29, wherein the smart instrument includes a plurality of control buttons for remotely controlling the surgery system.

104. (Previously presented) The smart instrument, as set forth in claim 30, wherein the smart instrument includes a plurality of control buttons for remotely controlling the surgery system.

105. (Previously presented) The smart instrument of claim 104, wherein the information includes a status of the control buttons.

106. (Previously presented) The smart instrument of claim 29, wherein the smart instrument includes an up button, a select button, and a down button.